

Claims

- [c1] 1. A cassette for holding substrates inside a load-lock, comprising:
- an outer casing with a front surface having a plurality of slots and two sidewalls having a plurality of holes at a bottom section thereof;
 - a plurality of braces positioned at corner edges inside the outer casing;
 - a plurality of side plates fastened to the braces, wherein the side plates are attached to the braces at a position that corresponds to each slot; and
 - a plurality of obstruction pieces positioned inside the outer casing corresponding to the holes at the bottom section of the sidewalls of the outer casing, wherein each obstruction piece comprises a fixed part and an obstructing part, the fixed part attaches firmly to a bottom plate of the outer casing, and the obstructing part blocks the corresponding hole.
- [c2] 2. The cassette of claim 1, wherein the cassette further comprises a plurality of horizontal screw sets, each set of horizontal screws engages with the bottom plate of the outer casing near the corresponding hole.

- [c3] 3. The cassette of claim 2, wherein each set of horizontal screws fastens the fixed part of each obstruction piece to the bottom plate of the outer casing.
- [c4] 4. The cassette of claim 1, wherein the obstruction pieces are L-shaped.
- [c5] 5. The cassette of claim 1, wherein the holes on the bottom section of the sidewalls of the outer casing are rectangular.
- [c6] 6. The cassette of claim 1, wherein the braces are set up on all four corners inside the outer casing and the side plates are attached to all four braces and correspond with each slot on the same horizontal plane.
- [c7] 7. The cassette of claim 6, wherein the four side plates corresponding to each slot support corners of a substrate.
- [c8] 8. A cassette, comprising:
 - an outer casing with a front surface having a plurality of slots and two side surfaces having a plurality of holes;
 - a plurality of braces positioned at corner edges inside the outer casing;
 - a plurality of side plates attached to the braces corresponding to each slot for supporting a substrate; and

a plurality of obstruction pieces positioned inside the outer casing to block the holes.

[c9] 9. The cassette of claim 8, wherein the cassette further comprises a plurality of horizontal screw sets, and each set of horizontal screws engages with a bottom plate of the outer casing near the holes.

[c10] 10. The cassette of claim 8, wherein each obstruction piece comprises a fixed part and an obstructing part, the fixed part is firmly attached to the outer casing and the obstructing part blocks the corresponding hole.

[c11] 11. The cassette of claim 8, wherein the obstruction pieces are L-shaped.

[c12] 12. The cassette of claim 8, wherein the braces are set on all four corners inside the outer casing and the side plates are attached to all four braces and correspond with each slot on the same horizontal plane.

[c13] 13. The cassette of claim 12, wherein the four side plates within the outer casing on the same horizontal plane corresponding to each slot support the corners of a substrate.